

Use of Maryland Hospital Emergency Departments

An Update and Recommended Strategies to Address Crowding

**Prepared in Response to the
Joint Chairman's Report (JCR)
2006 General Assembly Session**

**Maryland Health Care Commission
December 20, 2006**

Background

- **Trends in Maryland Hospital Emergency Department Utilization: An Analysis of Issues and Recommended Strategies to Address Crowding- Issued 2002**
- **Renewed Focus on ED Crowding**
 - **Maryland**
 - **Baltimore City Task Force**
 - **Maryland Patient Safety Center ED Collaborative**
 - **Maryland ED Overcrowding Leadership Summit**
 - **National**
 - **RWJ Foundation's Urgent Matters Project**
 - **IOM Report**
- **2006 Joint Chairman's Report (JCR) Update Request**
 - **Due January 1, 2007**

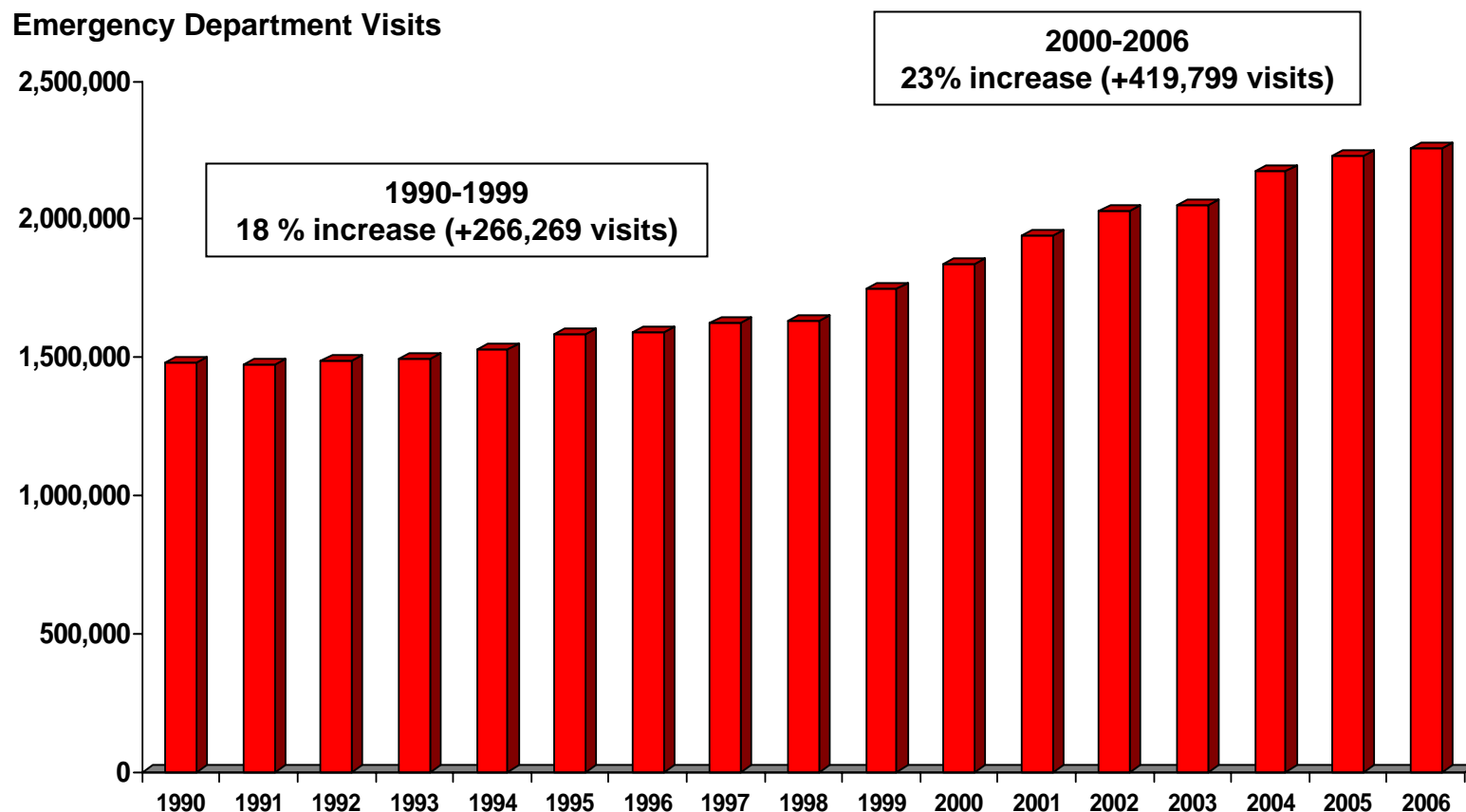
Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Crowding

- **Overview: Maryland and National Trends in Emergency Department Utilization**
- **Profile: Emergency Department Patients in Maryland**
- **Emergency Department Crowding and Patient Flow**
- **Recommendations**

Reviewers Group

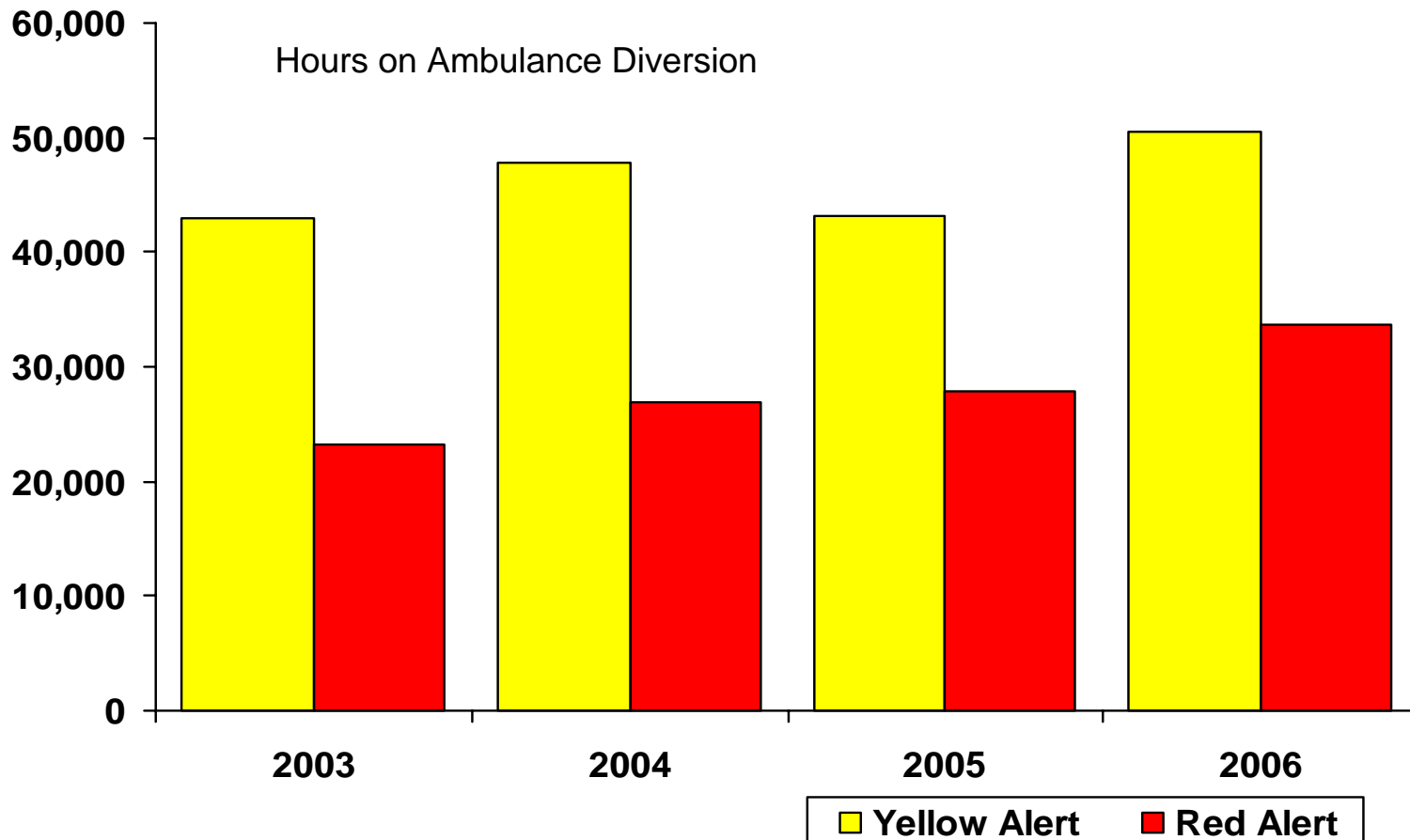
- **Adventist Health Care System**
- **Baltimore City Health Department**
- **Commissioner Andrew N. Pollak, M.D.**
- **Department of Health and Mental Hygiene**
- **Franklin Square Hospital**
- **Johns Hopkins University Hospital**
- **Health Services Cost Review Commission**
- **Maryland Chapter of the American College of Emergency Physicians**
- **Maryland Community Health Resources Commission**
- **Maryland Hospital Association**
- **Maryland Institute for Emergency Medical Systems Services (MIEMSS)**
- **Maryland Patient Safety Center**
- **Mid-Atlantic Association of Community Health Centers**
- **Med-Chi**
- **Mental Hygiene Administration**
- **Office of Health Care Quality**
- **Shore Health System**
- **Washington County Health System**

Trends in Emergency Department Visits: Maryland, Fiscal Years 1990-2006



Source: Maryland Health Care Commission (Data reported is based on the HSCRC Financial Data Base, Fiscal Years 1990-2006.)

Red and Yellow Alert Hours: Maryland, Fiscal Years 2003-2006

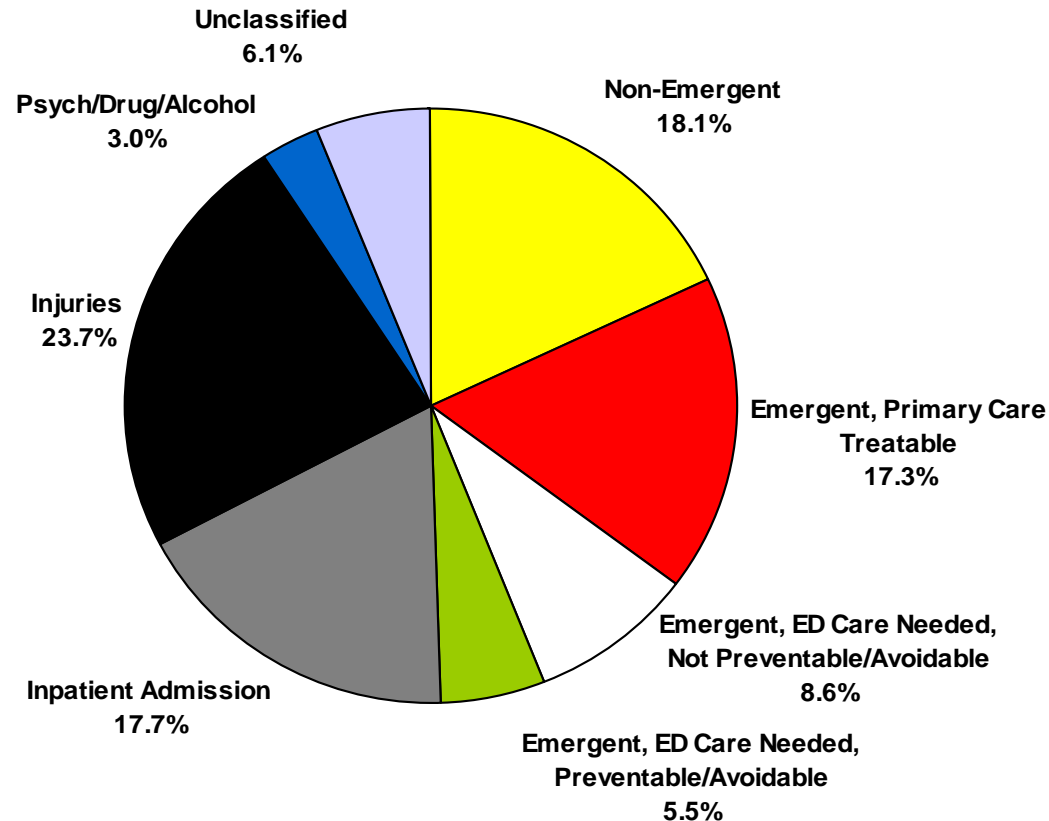


Source: Maryland Health Care Commission (Data reported is from the County Alert Tracking System maintained by MIEMSS.)

Measures of ED Crowding: Maryland, 2003 and 2006

Measure	2003		2006	
	Number	% of Total	Number	% of Total
<u>ED Treatment Spaces</u>				
Less than 20	9	18.0%	7	14.0%
20-50	37	74.0%	35	70.0%
More than 50	4	8.0%	8	16.0%
<u>Annual ED Visit Volume</u>				
Less than 50,000	29	63.0%	22	47.8%
50-75,000	13	28.3%	18	39.1%
More than 75,000	4	8.7%	6	13.0%
<u>Annual ED Visit Volume per Treatment Space</u>				
Less than 1,200	12	26.1%	11	23.9%
Between 1,200-1,600	19	41.3%	23	50.0%
More than 1,600	15	32.6%	12	26.1%

Classification of Hospital Emergency Department Visits: Maryland, 2005



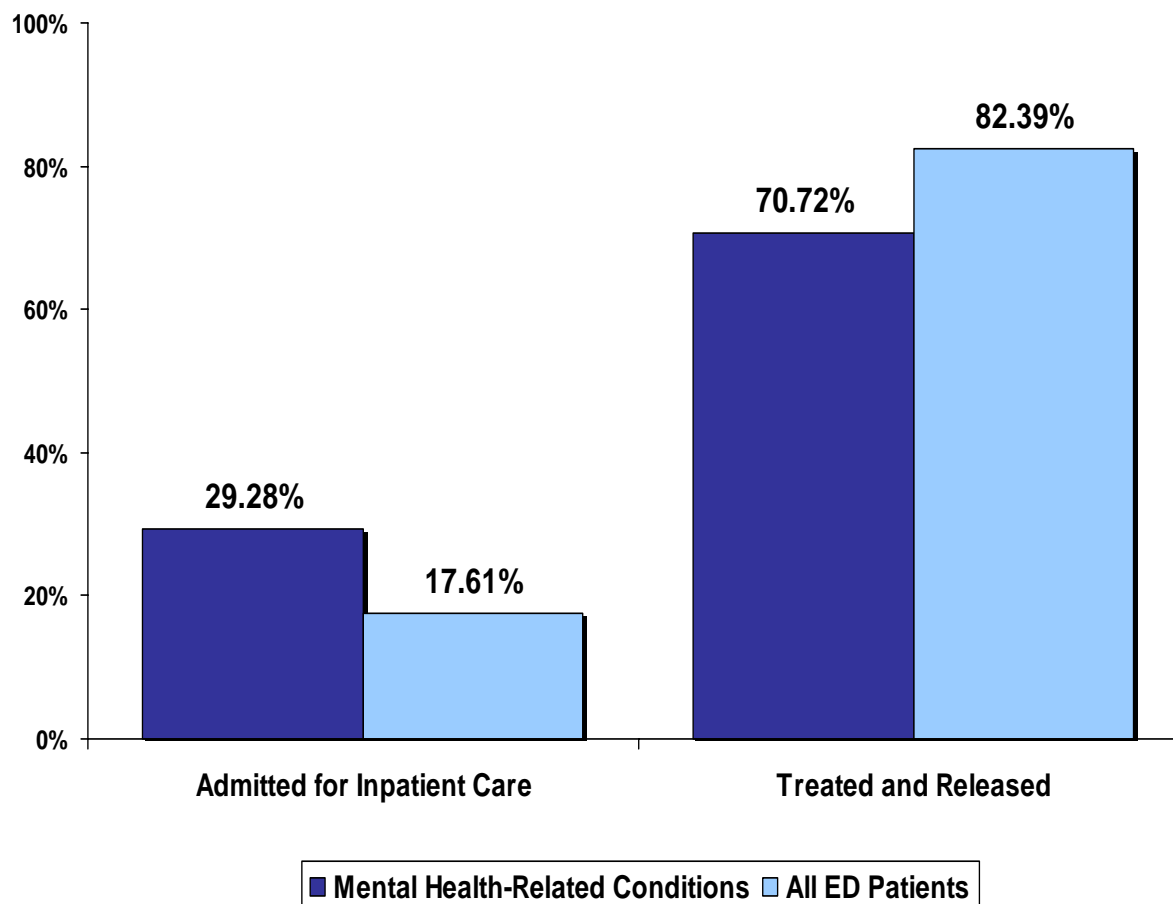
Source: Maryland Health Care Commission (The classification of emergency department visits is based on the methodology developed by John Billings and colleagues at the Robert F. Wagner School of Public Service, New York University. The emergency department visit data reported is from the Hospital Discharge Data Base and Hospital Ambulatory Care Data Base for January-December 2005.)

Classification of Emergency Department Visits by Payment Source: Maryland, 2005

Payment Source	Non- Emergent	Emergent, PC Treatable	Emergent, Preventable	Emergent, Not Preventable	Other*
Commercial	18.6%	17.7%	5.2%	9.6%	48.8%
Medicaid	21.3%	20.7%	7.3%	7.3%	43.4%
Medicare	10.3%	11.0%	4.1%	7.7%	66.9%
Private HMO	18.8%	18.9%	5.6%	10.5%	46.3%
No Insurance	21.7%	19.1%	6.1%	8.4%	44.8%
Other**/Unknown	13.5%	10.2%	2.7%	6.0%	67.6%

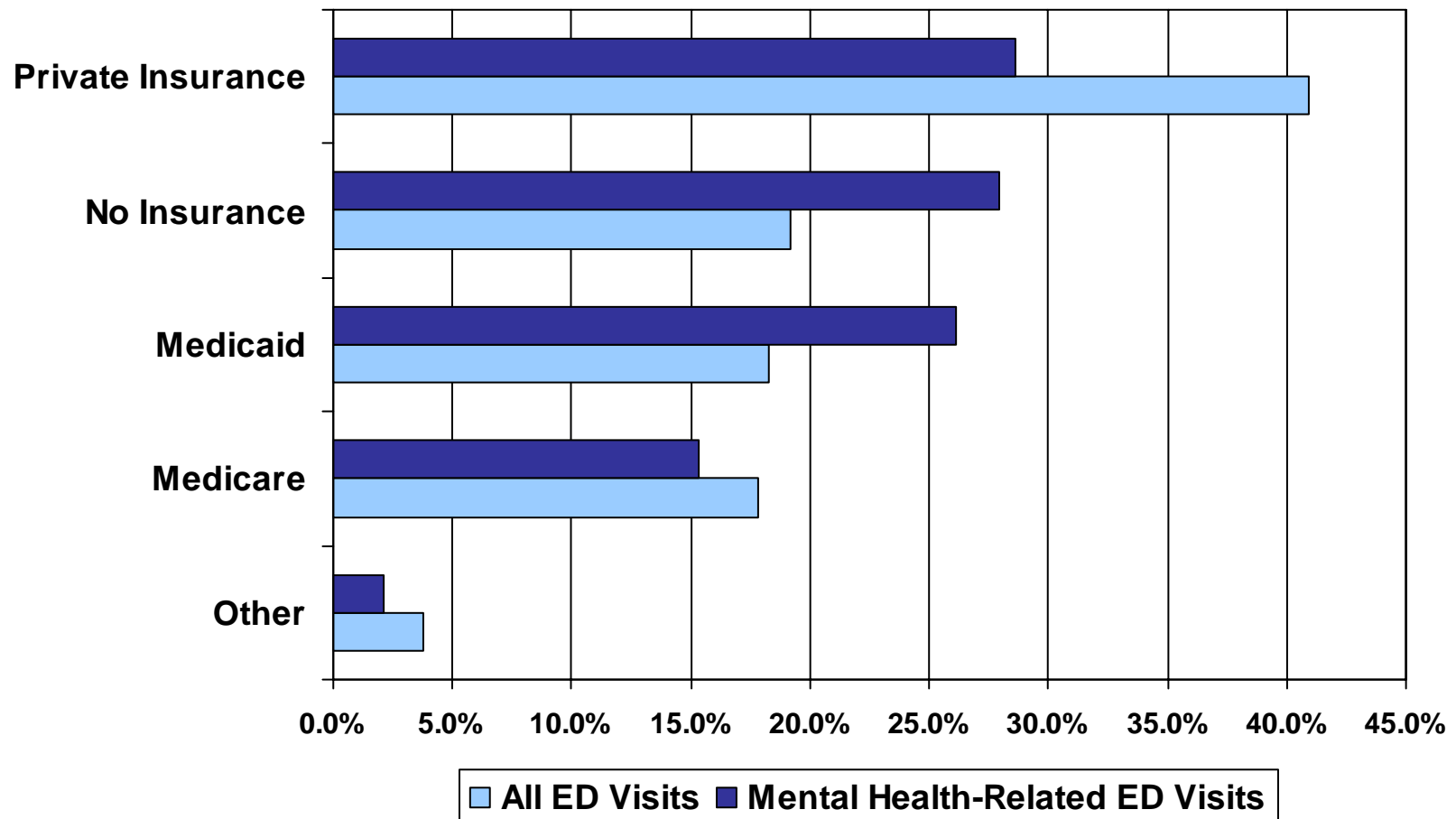
Source: The classification system is from Billings, J., et al. Emergency Department Use: The New York Story. The Commonwealth Fund Issue Brief, November 2000. Data HSCRC, Hospital Discharge Abstract Data Base and Hospital Ambulatory Care Data Set, CY 2005. * Other includes injuries, inpatient admission, mental health, substance abuse. **Other is defined as Worker's Compensation, Government Programs, and Title V.

Disposition of All Emergency Department Patients and Patients with Mental Health-Related Conditions: Maryland, 2005



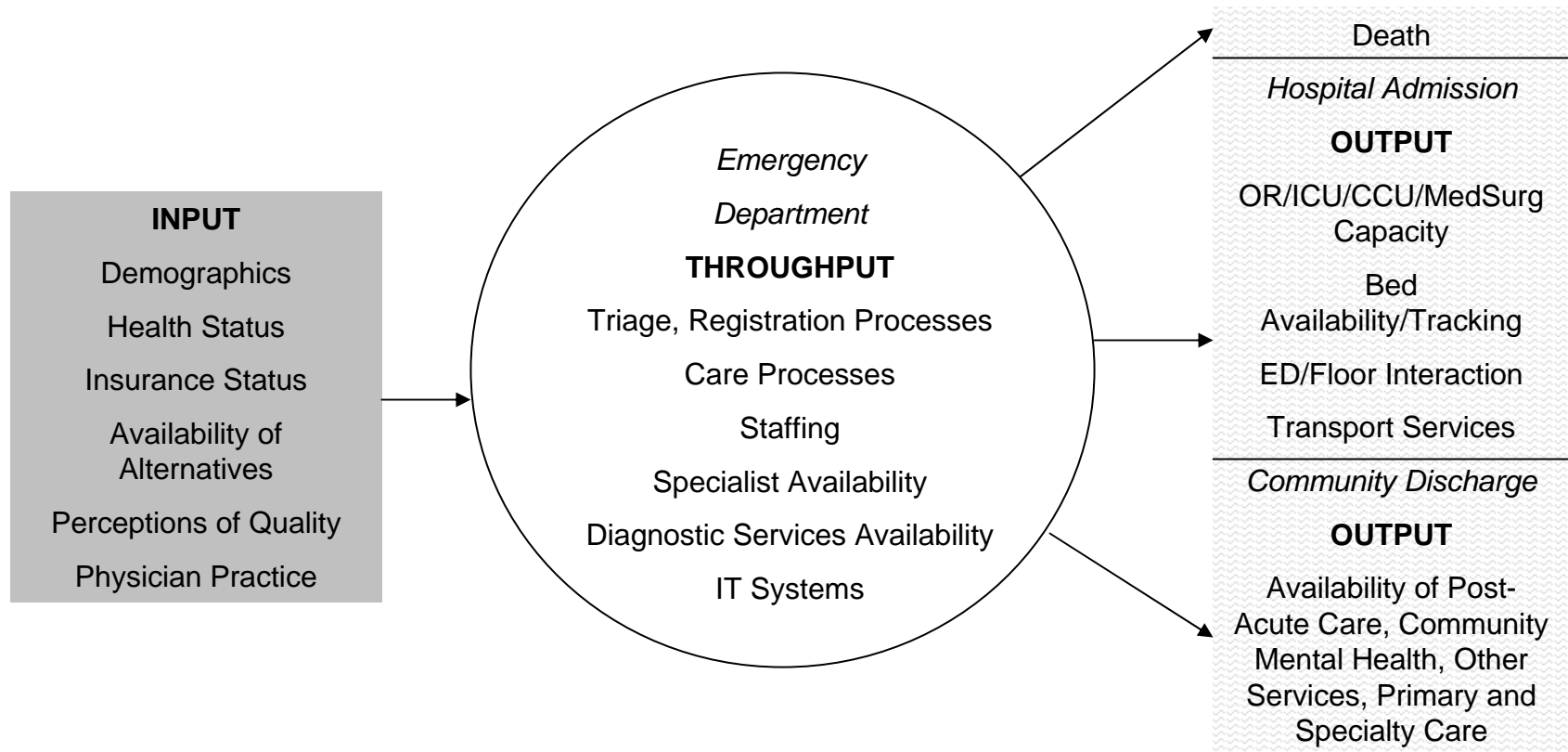
Source: Maryland Health Care Commission (Data reported is from the Hospital Discharge Abstract Data Base; and Hospital Ambulatory Care Data Base for calendar year 2005. Patients with mental disorders include ICD-9 codes 290-319.)

Total Emergency Department Visits and Mental Health-Related Visits by Major Payment Source: Maryland, 2005



Source: Maryland Health Care Commission (Data reported is from the Hospital Discharge Abstract Data Base; and Hospital Ambulatory Care Data Base for calendar year 2005. Patients with mental disorders include ICD-9 codes 290-319. No insurance includes patients reported as self pay and no charge.)

Input/Throughput/Output Model of Emergency Department Patient Flow



Source: Urgent Matters, The George Washington University Medical Center, *Bursting at the Seams: Improving Patient Flow to Help America's Emergency Departments*, September 2004.

Recommendations: Input/Demand

- **#1 Study options to improve access to primary care and community-based mental health services.**
(Maryland Community Health Resources Commission with DHMH, Med-Chi, Mid-Atlantic Association of Community Health Centers, MHCC)
- **#2 Study access, quality of care and reimbursement issues associated with urgent care center models.**
(MHCC and HSCRC)
- **#3 During times of regional overcapacity, the MIEMSS Overload Mitigation Plan should be implemented.** *(MIEMSS)*

Recommendations: Throughput

- **#4 Gather information on innovation to improve patient flow and ED design. Written plans outlining on-going and planned activities to address ED overcrowding. (*Maryland Hospital Association and Hospitals*)**
- **#5 Update the existing data sets to better support policy development (e.g., hour of ED arrival). (*MHCC and HSCRC*)**
- **#6 Standardized measures of emergency department utilization and patient flow. (*Maryland Patient Safety Center, Maryland Chapter of ACEP, Hospitals, MHCC*)**
- **#7 Update State Health Plan to include standards to guide the development of emergency department treatment space. (*MHCC*)**

Recommendations: Output/Disposition

- **#8 Consider the increase in admissions through the ED in State Health Plan update of inpatient bed need projections. (MHCC)**
- **#9 Develop plan to guide future role and capacity of state psychiatric hospitals. (DHMH)**

Develop projections of future bed need for acute inpatient psychiatric services. (MHCC)